

Table 45 (page 1 of 4). Death rates for motor vehicle-related injuries, according to sex, race, Hispanic origin, and age: United States, selected years 1950–2000

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	<i>1950¹</i>	<i>1960¹</i>	<i>1970</i>	<i>1980</i>	<i>1990</i>	<i>1995</i>	<i>1997</i>	<i>1998</i>	<i>Comparability modified 1998²</i>	<i>1999³</i>	<i>2000³</i>
Deaths per 100,000 resident population											
All persons											
All ages, age adjusted	24.6	23.1	27.6	22.3	18.5	16.5	16.3	16.1	15.7	15.5	15.7
All ages, crude	23.1	21.3	26.9	23.5	18.8	16.5	16.2	16.1	15.7	15.5	15.7
Under 1 year	8.4	8.1	9.8	7.0	4.9	4.7	4.3	4.3	4.2	4.8	4.4
1–14 years	9.8	8.6	10.5	8.2	6.0	5.3	5.1	4.8	4.7	4.4	4.4
1–4 years	11.5	10.0	11.5	9.2	6.3	5.2	5.0	5.0	4.9	4.3	4.3
5–14 years	8.8	7.9	10.2	7.9	5.9	5.4	5.1	4.8	4.7	4.5	4.5
15–24 years	34.4	38.0	47.2	44.8	34.1	29.5	27.9	26.9	26.2	26.8	27.5
15–19 years	29.6	33.9	43.6	43.0	33.1	28.6	27.3	26.4	25.8	26.3	26.4
20–24 years	38.8	42.9	51.3	46.6	35.0	30.4	28.5	27.5	26.8	27.4	28.7
25–34 years	24.6	24.3	30.9	29.1	23.6	19.8	18.9	18.4	17.9	17.9	18.4
35–44 years	20.3	19.3	24.9	20.9	16.9	15.4	15.2	15.6	15.2	15.0	15.4
45–64 years	25.2	23.0	26.5	18.0	15.7	14.2	14.7	14.7	14.3	14.1	14.5
45–54 years	22.2	21.4	25.5	18.6	15.6	13.9	14.3	14.4	14.0	13.9	14.4
55–64 years	29.0	25.1	27.9	17.4	15.9	14.6	15.3	15.1	14.7	14.4	14.6
65 years and over	43.1	34.7	36.2	22.5	23.1	22.7	23.6	23.7	23.1	22.5	21.6
65–74 years	39.1	31.4	32.8	19.2	18.6	17.6	18.2	18.5	18.0	18.0	16.7
75–84 years	52.7	41.8	43.5	28.1	29.1	28.6	29.0	28.9	28.2	26.7	25.8
85 years and over	45.1	37.9	34.2	27.6	31.2	31.4	32.7	31.5	30.7	30.2	30.0
Male											
All ages, age adjusted	38.5	35.4	41.5	33.6	26.5	23.1	22.4	22.4	21.8	21.8	22.2
All ages, crude	35.4	31.8	39.7	35.3	26.7	22.7	22.0	22.0	21.5	21.4	21.9
Under 1 year	9.1	8.6	9.3	7.3	5.0	4.9	4.3	4.6	4.5	5.0	4.6
1–14 years	12.3	10.7	13.0	10.0	7.0	6.2	5.7	5.6	5.5	5.1	5.0
1–4 years	13.0	11.5	12.9	10.2	6.9	5.6	5.3	5.4	5.3	4.7	4.8
5–14 years	11.9	10.4	13.1	9.9	7.0	6.4	5.8	5.7	5.6	5.3	5.1
15–24 years	56.7	61.2	73.2	68.4	49.5	41.4	38.1	37.3	36.4	36.9	38.3
15–19 years	46.3	51.7	64.1	62.6	45.5	36.8	34.8	33.9	33.1	33.6	34.5
20–24 years	66.7	73.2	84.4	74.3	53.3	46.1	41.7	41.2	40.2	40.5	42.4
25–34 years	40.8	40.1	49.4	46.3	35.7	29.1	27.5	27.0	26.3	26.5	27.6
35–44 years	32.5	29.9	37.7	31.7	24.7	21.9	21.2	21.7	21.2	21.3	22.1
45–64 years	37.7	33.3	38.9	26.5	21.9	19.7	20.0	20.4	19.9	19.8	20.6
45–54 years	33.6	31.6	37.2	27.6	22.0	19.6	19.9	20.3	19.8	19.8	20.8
55–64 years	43.1	35.6	40.9	25.4	21.7	19.8	20.2	20.5	20.0	19.7	20.2
65 years and over	66.6	52.1	54.4	33.9	32.1	30.8	31.9	32.1	31.3	31.3	29.4
65–74 years	59.1	45.8	47.3	27.3	24.2	22.3	23.6	23.5	22.9	23.6	22.0
75–84 years	85.0	66.0	68.2	44.3	41.2	39.7	39.7	39.7	38.7	37.5	35.0
85 years and over	78.1	62.7	63.1	56.1	64.5	61.9	60.4	61.2	59.7	57.6	54.6
Female											
All ages, age adjusted	11.5	11.7	14.9	11.8	11.0	10.4	10.6	10.3	10.0	9.8	9.7
All ages, crude	10.9	11.0	14.7	12.3	11.3	10.6	10.8	10.5	10.2	9.9	9.9
Under 1 year	7.6	7.5	10.4	6.7	4.9	4.4	4.4	4.0	3.9	4.7	4.1
1–14 years	7.2	6.3	7.9	6.3	4.9	4.5	4.4	4.0	3.9	3.7	3.8
1–4 years	10.0	8.4	10.0	8.1	5.6	4.8	4.7	4.6	4.5	3.8	3.8
5–14 years	5.7	5.4	7.2	5.7	4.7	4.3	4.3	3.8	3.7	3.7	3.8
15–24 years	12.6	15.1	21.6	20.8	17.9	17.1	17.1	16.1	15.7	16.3	16.3
15–19 years	12.9	16.0	22.7	22.8	20.0	20.0	19.4	18.5	18.0	18.6	17.8
20–24 years	12.2	14.0	20.4	18.9	16.0	14.1	14.6	13.3	13.0	13.7	14.6
25–34 years	9.3	9.2	13.0	12.2	11.5	10.4	10.4	9.9	9.7	9.3	9.3
35–44 years	8.5	9.1	12.9	10.4	9.2	9.0	9.2	9.7	9.5	8.9	8.8
45–64 years	12.6	13.1	15.3	10.3	10.1	9.1	9.6	9.3	9.1	8.7	8.8
45–54 years	10.9	11.6	14.5	10.2	9.6	8.5	8.9	8.8	8.6	8.2	8.3
55–64 years	14.9	15.2	16.2	10.5	10.8	9.9	10.8	10.1	9.9	9.6	9.6
65 years and over	21.9	20.3	23.1	15.0	17.2	17.2	17.8	17.8	17.4	16.4	16.0
65–74 years	20.6	19.0	21.6	13.0	14.1	13.8	13.8	14.5	14.1	13.4	12.4
75–84 years	25.2	23.0	27.2	18.5	21.9	21.5	22.0	21.8	21.3	19.5	19.5
85 years and over	22.1	22.0	18.0	15.2	18.3	19.6	21.5	19.2	18.7	18.6	19.4
White male											
All ages, age adjusted	37.9	34.8	40.4	33.8	26.3	22.9	22.2	22.2	21.7	21.8	22.2
All ages, crude	35.1	31.5	39.1	35.9	26.7	22.6	21.9	21.9	21.4	21.5	22.0
Under 1 year	9.1	8.8	9.1	7.0	4.8	4.3	3.7	4.6	4.5	5.0	4.1
1–14 years	12.4	10.6	12.5	9.8	6.6	5.9	5.4	5.1	5.0	4.9	4.9
15–24 years	58.3	62.7	75.2	73.8	52.5	43.2	39.8	39.4	38.4	38.6	40.3
25–34 years	39.1	38.6	47.0	46.6	35.4	28.8	26.8	26.3	25.7	26.4	27.1
35–44 years	30.9	28.4	35.2	30.7	23.7	21.1	20.7	21.2	20.7	20.9	21.9
45–64 years	36.2	31.7	36.5	25.2	20.6	18.9	19.2	19.6	19.1	19.1	19.9
65 years and over	67.1	52.1	54.2	32.7	31.4	30.2	31.8	31.9	31.1	31.3	29.3

See footnotes at end of table.

Table 45 (page 2 of 4). Death rates for motor vehicle-related injuries, according to sex, race, Hispanic origin, and age: United States, selected years 1950–2000

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	<i>1950¹</i>	<i>1960¹</i>	<i>1970</i>	<i>1980</i>	<i>1990</i>	<i>1995</i>	<i>1997</i>	<i>1998</i>	<i>Comparability modified 1998²</i>	<i>1999³</i>	<i>2000³</i>
Deaths per 100,000 resident population											
Black male											
All ages, age adjusted	34.8	39.6	51.0	34.2	29.9	26.4	25.6	26.2	25.6	24.7	24.8
All ages, crude	37.2	33.1	44.3	31.1	28.1	24.6	24.2	24.5	23.9	23.1	23.4
Under 1 year	---	*	10.6	7.8	*	8.3	7.8	*	*	*	7.1
1–14 years ⁴	10.4	11.2	16.3	11.4	8.9	7.8	7.6	8.5	8.3	6.8	6.0
15–24 years	42.5	46.4	58.1	34.9	36.1	34.3	32.7	30.3	29.6	30.7	30.2
25–34 years	54.4	51.0	70.4	44.9	39.5	32.9	33.2	34.5	33.7	30.8	33.9
35–44 years	46.7	43.6	59.5	41.2	33.5	28.9	27.0	26.9	26.2	26.5	27.4
45–64 years	54.6	47.8	61.7	39.5	33.3	26.9	28.9	29.0	28.3	27.8	28.2
65 years and over	52.6	48.2	53.4	42.4	36.3	36.3	32.3	36.0	35.1	32.3	30.7
American Indian or Alaska Native male⁵											
All ages, age adjusted	---	---	---	78.9	48.3	43.8	43.5	41.1	40.1	42.6	42.1
All ages, crude	---	---	---	74.6	47.6	43.8	42.2	39.9	38.9	40.5	41.5
1–14 years	---	---	---	15.1	11.6	8.5	8.2	10.1	9.9	9.4	10.0
15–24 years	---	---	---	126.1	75.2	76.6	67.6	60.4	58.9	69.1	69.7
25–34 years	---	---	---	107.0	78.2	73.1	64.3	55.9	54.5	47.1	59.1
35–44 years	---	---	---	82.8	57.0	50.4	54.7	51.3	50.0	47.2	46.1
45–64 years	---	---	---	77.4	45.9	42.5	37.8	44.5	43.4	47.1	40.5
65 years and over	---	---	---	97.0	43.0	*	50.1	36.2	35.3	51.1	46.7
Asian or Pacific Islander male⁶											
All ages, age adjusted	---	---	---	19.0	17.9	15.7	13.2	12.1	11.8	10.5	11.4
All ages, crude	---	---	---	17.1	15.8	13.1	11.4	10.8	10.5	9.4	10.3
1–14 years	---	---	---	8.2	6.3	4.3	2.7	3.2	3.1	2.3	2.4
15–24 years	---	---	---	27.2	25.7	20.6	15.7	16.3	15.9	16.8	19.6
25–34 years	---	---	---	18.8	17.0	13.2	15.7	12.5	12.2	11.0	11.9
35–44 years	---	---	---	13.1	12.2	10.4	8.5	9.3	9.1	7.7	7.0
45–64 years	---	---	---	13.7	15.1	15.0	12.1	12.3	12.0	9.0	10.7
65 years and over	---	---	---	37.3	33.6	34.4	31.0	22.9	22.3	21.7	22.2
Hispanic male⁷											
All ages, age adjusted	---	---	---	---	29.5	25.3	22.1	22.2	21.7	21.9	23.1
All ages, crude	---	---	---	---	29.2	23.5	20.8	20.8	20.3	21.2	22.4
1–14 years	---	---	---	---	7.2	5.8	5.1	5.4	5.3	4.9	4.8
15–24 years	---	---	---	---	48.2	42.4	35.3	36.0	35.1	37.9	42.3
25–34 years	---	---	---	---	41.0	31.6	27.4	27.4	26.7	30.7	32.1
35–44 years	---	---	---	---	28.0	23.8	22.9	21.5	21.0	21.9	22.8
45–64 years	---	---	---	---	28.9	23.0	21.3	21.5	21.0	20.0	21.8
65 years and over	---	---	---	---	35.3	35.1	28.6	31.3	30.5	27.3	25.5
White, non-Hispanic male⁷											
All ages, age adjusted	---	---	---	---	25.7	22.2	21.9	21.9	21.4	21.3	21.6
All ages, crude	---	---	---	---	26.0	22.0	21.7	21.7	21.2	21.2	21.6
1–14 years	---	---	---	---	6.4	5.8	5.4	5.0	4.9	4.8	4.9
15–24 years	---	---	---	---	52.3	42.3	40.1	39.4	38.4	38.0	39.2
25–34 years	---	---	---	---	34.0	27.5	26.2	25.5	24.9	25.0	25.5
35–44 years	---	---	---	---	23.1	20.3	20.0	20.8	20.3	20.4	21.4
45–64 years	---	---	---	---	19.8	18.2	18.8	19.2	18.7	18.8	19.5
65 years and over	---	---	---	---	31.1	29.6	31.7	31.8	31.0	31.3	29.4
White female											
All ages, age adjusted	11.4	11.7	14.9	12.2	11.2	10.6	10.6	10.4	10.1	9.9	9.9
All ages, crude	10.9	11.2	14.8	12.8	11.6	10.8	10.9	10.7	10.4	10.1	10.2
Under 1 year	7.8	7.5	10.2	7.1	4.7	4.5	4.3	3.3	3.2	3.8	3.4
1–14 years	7.2	6.2	7.5	6.2	4.8	4.3	4.1	3.9	3.8	3.6	3.7
15–24 years	12.6	15.6	22.7	23.0	19.5	18.4	18.4	17.3	16.9	17.3	17.3
25–34 years	9.0	9.0	12.7	12.2	11.6	10.4	10.3	10.0	9.8	9.4	9.3
35–44 years	8.1	8.9	12.3	10.6	9.2	9.0	9.0	9.6	9.4	8.8	8.9
45–64 years	12.7	13.1	15.1	10.4	9.9	8.9	9.4	9.1	8.9	8.6	8.8
65 years and over	22.2	20.8	23.7	15.3	17.4	17.7	17.9	18.1	17.7	16.7	16.4

See footnotes at end of table.

Table 45 (page 3 of 4). Death rates for motor vehicle-related injuries, according to sex, race, Hispanic origin, and age: United States, selected years 1950–2000

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ¹	1960 ¹	1970	1980	1990	1995	1997	1998	Comparability modified 1998 ²	1999 ³	2000 ³
Deaths per 100,000 resident population											
Black female											
All ages, age adjusted	9.3	10.4	14.1	8.5	9.6	9.1	10.2	9.7	9.5	9.2	8.6
All ages, crude	10.2	9.7	13.4	8.3	9.4	9.0	9.9	9.3	9.1	9.0	8.5
Under 1 year	---	8.1	11.9	*	7.0	*	*	9.4	9.2	9.3	*
1–14 years ⁴	7.2	6.9	10.2	6.3	5.3	5.1	5.6	4.8	4.7	4.8	4.2
15–24 years	11.6	9.9	13.4	8.0	9.9	10.7	11.3	10.3	10.0	12.1	12.0
25–34 years	10.8	9.8	13.3	10.6	11.1	10.5	11.2	8.9	8.7	8.9	9.8
35–44 years	11.1	11.0	16.1	8.3	9.4	9.8	10.2	11.1	10.8	9.7	8.3
45–64 years	11.8	12.7	16.7	9.2	10.7	9.4	11.0	10.6	10.3	9.0	9.0
65 years and over	14.3	13.2	15.7	9.5	13.5	11.5	14.2	13.8	13.5	13.0	10.5
American Indian or Alaska Native female ⁵											
All ages, age adjusted	---	---	---	32.0	17.5	19.7	22.4	23.0	22.4	21.4	23.0
All ages, crude	---	---	---	32.0	17.3	20.4	20.9	22.3	21.8	20.6	22.7
1–14 years	---	---	---	15.0	8.1	9.1	10.0	9.4	9.2	*	8.4
15–24 years	---	---	---	42.3	31.4	32.7	24.5	30.4	29.7	28.6	35.1
25–34 years	---	---	---	52.5	18.8	36.7	27.6	33.4	32.6	32.8	26.7
35–44 years	---	---	---	38.1	18.2	19.4	21.5	21.7	21.2	27.1	28.7
45–64 years	---	---	---	32.6	17.6	17.1	22.5	24.1	23.5	17.5	22.0
65 years and over	---	---	---	*	*	*	35.7	27.7	27.0	28.0	22.9
Asian or Pacific Islander female ⁶											
All ages, age adjusted	---	---	---	9.3	10.4	9.1	8.8	7.2	7.0	7.3	6.9
All ages, crude	---	---	---	8.2	9.0	8.0	8.0	6.6	6.4	6.6	6.1
1–14 years	---	---	---	7.4	3.6	3.0	3.2	2.4	2.3	1.9	2.1
15–24 years	---	---	---	7.4	11.4	12.4	11.5	9.4	9.2	8.7	6.7
25–34 years	---	---	---	7.3	7.3	5.1	6.1	6.1	5.9	4.8	4.9
35–44 years	---	---	---	8.6	7.5	6.2	6.9	4.6	4.5	4.6	5.0
45–64 years	---	---	---	8.5	11.8	10.8	8.6	7.5	7.3	10.0	6.8
65 years and over	---	---	---	18.6	24.3	19.7	20.7	16.7	16.3	15.1	19.0
Hispanic female ⁷											
All ages, age adjusted	---	---	---	---	9.6	8.9	8.9	8.3	8.1	8.1	8.1
All ages, crude	---	---	---	---	8.9	8.3	8.3	7.8	7.6	7.6	7.7
1–14 years	---	---	---	---	4.8	4.4	3.9	3.8	3.7	3.8	4.2
15–24 years	---	---	---	---	11.6	12.8	13.1	11.4	11.1	11.7	11.8
25–34 years	---	---	---	---	9.4	7.7	8.3	8.5	8.3	8.2	7.6
35–44 years	---	---	---	---	8.0	8.1	8.1	7.4	7.2	6.6	7.5
45–64 years	---	---	---	---	11.4	9.2	9.0	9.6	9.4	8.5	8.2
65 years and over	---	---	---	---	14.9	13.9	14.1	11.2	10.9	12.9	12.0

See footnotes at end of table.

Table 45 (page 4 of 4). Death rates for motor vehicle-related injuries, according to sex, race, Hispanic origin, and age: United States, selected years 1950–2000

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ¹	1960 ¹	1970	1980	1990	1995	1997	1998	Comparability modified 1998 ²	1999 ³	2000 ³
White, non-Hispanic female ⁷											
Deaths per 100,000 resident population											
All ages, age adjusted	---	---	---	---	11.3	10.6	10.7	10.6	10.3	10.0	10.0
All ages, crude	---	---	---	---	11.7	10.9	11.1	11.0	10.7	10.4	10.4
1–14 years	---	---	---	---	4.7	4.2	4.1	3.8	3.7	3.5	3.5
15–24 years	---	---	---	---	20.4	19.0	19.2	18.3	17.8	18.2	18.1
25–34 years	---	---	---	---	11.7	10.6	10.4	10.1	9.9	9.5	9.4
35–44 years	---	---	---	---	9.3	8.9	9.0	9.8	9.6	9.0	9.0
45–64 years	---	---	---	---	9.7	8.7	9.4	9.0	8.8	8.5	8.7
65 years and over	---	---	---	---	17.5	17.7	18.0	18.4	17.9	16.8	16.6

--- Data not available.

* Based on fewer than 20 deaths.

¹Includes deaths of persons who were not residents of the 50 States and the District of Columbia.

²Calculated by multiplying the 1998 rate by its comparability ratio to adjust for differences between ICD–9 and ICD–10. See Appendix II, Comparability ratio and table VI.

³Starting with 1999 data, cause of death is coded according to ICD–10. To estimate change between 1998 and 1999, compare the 1999 rate with the comparability-modified rate for 1998. See Appendix II, Comparability ratio and tables V and VI.

⁴In 1950 rate is for the age group under 15 years.

⁵Interpretation of trends should take into account that population estimates for American Indians increased by 45 percent between 1980 and 1990, partly due to better enumeration techniques in the 1990 decennial census and to the increased tendency for people to identify themselves as American Indian in 1990.

⁶Interpretation of trends should take into account that the Asian population in the United States more than doubled between 1980 and 1990, primarily due to immigration.

⁷Excludes data from States lacking an Hispanic-origin item on their death certificates. See Appendix I, National Vital Statistics System.

NOTES: Age-adjusted rates are calculated using the year 2000 standard population starting with *Health, United States, 2001*. See Appendix II, Age adjustment. For data years shown, code numbers for cause of death are based on the then current revision of the *International Classification of Diseases* (ICD). See Appendix II, tables IV and V. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race. Bias in death rates results from inconsistent race identification between the death certificate (source of data for numerator of death rates) and data from the Census Bureau (denominator); and from undercounts of some population groups in the census. The net effects of misclassification and under coverage result in death rates estimated to be overstated by 1 percent for the white population and 5 percent for the black population; and death rates estimated to be understated by 21 percent for American Indians, 11 percent for Asians, and 2 percent for Hispanics (Rosenberg HM, Maurer JD, Sorlie PD, Johnson NJ, et al. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. National Center for Health Statistics. Vital Health Stat 2(128). 1999). For additional injury-related statistics, see www.cdc.gov/ncipc/wisqars, a Web-based interactive database for injury data. Data for additional years are available (see Appendix III).

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System; Grove RD and Hetzel AM. *Vital statistics rates in the United States, 1940–60*. Washington: Public Health Service, 1968; *Vital statistics of the United States, vol II, mortality, part A*, for data years 1950–93. Public Health Service. Washington: U.S. Government Printing Office; for 1994–99, data for all persons, white, and black are available on the NCHS Web site at www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from table 1 and unpublished Hispanic population estimates prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census for 1985–96. Minino AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: Final data for 2000. National vital statistics reports. vol 50 no 15. Hyattsville, Maryland: National Center for Health Statistics. 2002.